



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0678; Directorate Identifier 2011-NM-285-AD; Amendment 39-17280; AD 2012-24-10]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 747-400 and -400F series airplanes. This AD was prompted by multiple reports of integrated display unit (IDU) malfunctions and mode control panel (MCP) malfunctions. This AD requires installing new software, replacing the duct assembly with a new duct assembly, making wiring changes, and routing certain wire bundles. We are issuing this AD to prevent IDU malfunctions, which could affect the ability of the flightcrew to read primary displays for airplane attitude, altitude, or airspeed, and consequently reduce the ability of the flightcrew to maintain control of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax

206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Ana Martinez Hueto, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6592; fax: 425-917-6591; email: ana.m.hueto@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on July 11, 2012 (77 FR 40832). That NPRM proposed to require installing new software, replacing the duct assembly with a new duct assembly, making wiring changes, and routing certain wire bundles.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 40832, July 11, 2012), and the FAA's response to each comment.

Request to Use Unissued Service Information

Boeing requested that we refer to Boeing Alert Service Bulletin 747-21A2523, Revision 2, which has not been issued, instead of Boeing Alert Service Bulletin 747-21A2523, Revision 1, dated October 3, 2011, as the appropriate source of service information in the NPRM (77 FR 40832, July 11, 2012). Boeing stated that Boeing Alert Service Bulletin 747-21A2523, Revision 2, describes additional wire changes for Model 747-400 airplanes, and that one additional airplane is added to the effectivity of that service bulletin.

We disagree to refer to Boeing Alert Service Bulletin 747-21A2523, Revision 2, in this AD. That service bulletin has not been issued. Referring to a document that has not been issued violates the Federal Register regulations for materials incorporated by reference rules. See 1 CFR 51.1(f). We do not consider that delaying this action until after the release of a planned service bulletin is warranted. Additionally, increasing the AD applicability would require issuing a supplemental NPRM for public comment. We find that delaying this action would be inappropriate in light of the identified unsafe condition. Once Boeing Alert Service Bulletin 747-21A2523, Revision 2, is issued and we have reviewed that service bulletin, we might consider further AD rulemaking. We have not changed this final rule regarding this issue.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 40832, July 11, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 40832, July 11, 2012).

Costs of Compliance

We estimate that this AD affects 33 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Duct assembly and replacement wiring changes	41 work-hours X \$85 per hour = \$3,485	\$20,121	\$23,606	\$778,998
Software change	3 work-hours X \$85 per hour = \$255	\$0	\$255	\$8,415

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-24-10 **The Boeing Company**: Amendment 39-~~17280~~; Docket No. FAA-2012-0678; Directorate Identifier 2011-NM-285-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 747-400 and -400F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-21A2523, Revision 1, dated October 3, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 21, Air Conditioning.

(e) Unsafe Condition

This AD was prompted by multiple reports of integrated display unit (IDU) malfunctions and mode control panel (MCP) malfunctions. We are issuing this AD to prevent IDU malfunctions, which could affect the ability of the flightcrew to read primary displays for airplane attitude, altitude, or airspeed, and consequently reduce the ability of the flightcrew to maintain control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Software Update

Within 12 months after the effective date of this AD: Install integrated display system software, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-21A2523, Revision 1, dated October 3, 2011.

Note 1 to paragraph (g) of this AD: Boeing Alert Service Bulletin 747-21A2523, Revision 1, dated October 3, 2011, refers to the service bulletins specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD as additional sources of guidance for the software installation specified by paragraph (g) of this AD, which are not incorporated by reference in this AD.

(1) Boeing Service Bulletin 747-31-2426, dated July 29, 2010 (for airplanes with Rolls-Royce engines).

(2) Boeing Service Bulletin 747-31-2427, dated July 29, 2010 (for airplanes with General Electric engines).

(3) Boeing Service Bulletin 747-31-2428, dated July 29, 2010 (for airplanes with Pratt & Whitney engines).

(h) Duct Assembly Replacement and Wiring Changes

Within 60 months after the effective date of this AD: Replace the duct assembly with a new duct assembly, do wiring changes, and route certain wire bundles, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-21A2523, Revision 1, dated October 3, 2011.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the

Related Information section of this AD. Information may be emailed to:

9-ANM--Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Ana Martinez Hueto, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6592; fax: 425-917-6591; email: ana.m.hueto@faa.gov.

(2) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 747-21A2523, Revision 1, dated October 3, 2011.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707,

MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1;
fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on November 30, 2012.

Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2012-29707 Filed 12/11/2012 at 8:45 am; Publication Date: 12/12/2012]